-- ABSTRACT

The invention relates to a method for producing semiconductor substrates by bonding. The aim of said method is to reduce the non-usable edge region on the bonded wafer component and to improve the edge geometry of the wafer composite. This is achieved by a method for joining two semiconductor wafers using a semiconductor wafer bonding process. The surfaces of the two semiconductor wafers that are to be bonded are provided with a border or edge geometry that has a special short front-end facet. After the bonding process, one of the two wafers is ablated to obtain an edge region that is as devoid as possible of defects and a usable wafer surface that is as large as possible. --